

### **REMARKS**

Claims 1, 3-6, 9-13 and 15-18, 21-26, as amended, and new claims 27-30 are pending in this application. In particular, claims 1 and 13 have been rewritten to further clarify the invention. In addition, various dependent claims have been rewritten to maintain consistency with the language now recited in the independent claim. Finally, claim 12 has been rewritten to overcome the 35 U.S.C. §§ 101 and 112 rejections.

In light of the Office Action, Applicants believe these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

As no new matter has been added by the amendments herein, Applicants respectfully request entry of these amendments at this time.

### **THE REJECTIONS UNDER 35 U.S.C. § 101 & § 112**

Claim 12 was rejected under 35 U.S.C. § 101 for the reason set forth on page 7 of the Office Action. In addition, claim 12 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the reasons provided on page 8 of the Office Action. In light of the amendment to claim 12, Applicants respectfully submit that these rejections are overcome. Reconsideration and withdrawal of the §§ 101 and 112 rejections is respectfully requested.

### **THE REJECTIONS UNDER 35 U.S.C. § 103**

Claims 1, 3-13, and 15-26 were rejected under 35 U.S.C. § 103(a) as obvious over European Patent No. 0 674 800 B1 to Dahlback ("Dahlback") and U.S. Patent No. 4,933,136 to Foster *et al.* ("Foster").

The test for obviousness is what the *combined* teachings of the references would have suggested to one of ordinary skill in the art. *See In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991) (emphasis added). However, as explained below, both references independently have several deficiencies with regard to the presently claimed invention and, thus, no combination of Dahlback and Foster even suggests the present invention.

As recognized by the Examiner, Dahlback does not state the degree of recrystallization achieved. Office Action at Page 9. In fact, Dahlback is completely silent as to a cladding tube

with an inner component that has a degree of recrystallization at least 97 percent and an outer component that has a degree of recrystallization of greater than 50 percent but less than the degree of recrystallization in the inner component. In addition, Dahlback is completely silent as to the recrystallization temperatures of the various compositions used in the lining and outer component.

In an attempt to remedy this deficiency, the Examiner cited Foster, apparently for its teaching of different degrees of recrystallization in the *inner* component of the cladding tube. *See, e.g.*, Examples 8.1 - 8.3 at Col. 6, line 65 to Col. 7, line 33. However, Foster has deficiencies that overlap with the stated deficiencies of Dahlback. For example, in contrast to the presently recited outer component, Foster clearly teaches that the outer component is only stress relieved, *i.e.*, no recrystallization evident, and that the inner component can vary in degrees of recrystallization. *Id.*; see also Col. 4, line 60 to Col. 5, line 1. As such, both references lack even the suggestion of an outer component with a degree of recrystallization higher than 50 percent but less than the at least 97 percent degree of recrystallization of the inner component.

Furthermore, Foster is directed to a different alloy than presently recited. As apparently recognized by the Examiner, the degree of recrystallization of a portion of a cladding tube is dependent on many factors including, but not limited to, the exact composition of the different alloys of the two different components, the temperature of the final anneal, and the time period undertaken for the final anneal. Foster teaches certain alloys for the inner component, which as clearly specified in Table 1, have larger amounts of iron than presently recited or disclosed in Dahlback. Col. 3, line 44 to Col. 4, line 4. Accordingly, the final anneal temperatures chosen and disclosed by Foster are based on the specific alloys. As such, a skilled artisan would not have been motivated to use one of the final anneal temperatures from Foster on a different alloy, such as the presently claimed alloy or the alloys taught by Dahlback at least because he/she would be aware that the temperature is dependent on the alloy composition.

And, like Dahlback, while Foster generally discusses annealing temperatures, the reference is silent as to the actual recrystallization temperatures of the compositions for use in the inner and outer components. As the Examiner is aware, a rejection based on inherent characteristics may not be based on probabilities or possibilities; rather, the inherent characteristic must be necessarily present. Thus, at least with respect to claims 10 and 27-29, even the slightest differences in the material composition will produce different properties,

including the recrystallization temperature. This characteristic of the presently claimed invention cannot be said to be necessarily present in either Dahlback or Foster.

In sum, without the use of the instant claims to use as a template, one of ordinary skill in the art would have lacked any motivation to arrive at the present invention. Furthermore, even assuming *arguendo* that a skilled artisan would have been motivated to combine the teachings and begin to experiment with various compositions and various annealing times and temperatures, the result of this vast experimentation would not be the present invention. In fact, as recognized by the Examiner, the degree of induced recrystallization is dependent on the material composition, as well as the time and temperature of the annealing process. Office Action at Page 9. As such, more than routine optimization would have been necessary to arrive at the presently recited invention without the instant claims to use as a guide. For example, at best, a skilled artisan following the teachings of Dahlback and Foster would have arrived at a cladding with an inner component that was a) stress relieved (without significant recrystallization or, in other words, no recrystallization evident), b) partially recrystallized, or c) fully recrystallized and an outer component that was merely *stress relieved*. Foster at Col. 4, lines 60-64 and Col. 4, line 68 to Col. 5, line 1.

Thus, Applicants respectfully submit that the combination of Dahlback and Foster does not anticipate or render obvious the presently recited invention. As such, Applicants respectfully request reconsideration and withdrawal of the § 103 rejection based thereon.

### CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned attorneys to discuss any remaining issues.

A Request for Continued Examination is submitted herewith with provision for the requisite fee. In addition, a Petition for Extension of Time to extend the time for response one month to and including October 1, 2007 is submitted herewith. No other fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Bingham McCutchen LLP Deposit Account No. 50-4047, Order No. 19378.0089.

Respectfully submitted,  
BINGHAM MCCUTCHEN LLP

Dated: October 1, 2007

By: Stephanie D. Scruggs  
Stephanie D. Scruggs, Registration No. 54,432  
BINGHAM MCCUTCHEN LLP  
2020 K Street, NW  
Washington, DC 20006  
(202) 373-6755 Telephone  
(202) 373-6001 Facsimile